INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

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	installations of	the missile	section of	the Military	Engine	er Corps	
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See	
	50X1-HUM
YUGOSLAVIA: MISSILE INFORMATION	
	50X1-HUM
The Inzenjeri (Military Engineer Corps) General Command has its	
headquarters at No 1 Sarajevska Street, BELGRADE	h e 50X1-HUM
Command is subdivided into various sections, one of which is the "ATOM	· · · · · · · · · · · · · · · · · ·
SKVADRON" (Atomic Squadron) commanded by Major General Ivan HARIS, AKA	
Ilja GROMOVNIK.	
The various rooms are identified by plates which only have number	s.
All officers on duty with this service are active, career officer	8
in the Army Engineer Corps who have passed the 4-year course at the Hi	gher
Technical Institute of CACAK (Serbia).	
In the event of war, the command of the section, along with the	
Supreme Headquarters of the Army, will be transferred to a zone of 18	
square kilometers, called HAN PLJESAK, located between ZVORNIK and	
SOKOLAC. This area is guarded by two files of soldiers and contains	
everything needed for the operations of the Supreme Command.	
Within the guarded zone there is also a launching-ramp for medium-	-
range missiles	50X1-HUM
Subordinate to the command of the Atomski Skvadron are all detach-	-
ments which are supplied with missiles, all ammunition and explosives	

factories, and the commands of Works Sectionsfor the construction of military installations, roads, bridges, barracks, and missile pads [piazzole].

These detachments have storage facilities and are supplied with material of every type, from building material to ammunition. The detachments also have separate areas reserved for material needed to prepare missile pads. The special sections are called POLIGONI [Polygons] and are at the following locations:

- 1. Polygon No 8; BABAJC LJIG, located between GORNJ MILAVZE and BELGRADE;
 - 2. Polygon No 9; located between SARAJEVO and TUZLA;
- 3. Polygon No 10; SEMIZOVAC, located between SARAJEVO and OLOVA, about 18 kilometers from SARAJEVO in the direction of SENICA;
 - 4. Polygon No 11; FOCA, near POVLAKA TJENTISTE;
 - 5. Polygon, number unknown; ZADAR;
- 6. Polygon, number unknown; BELI POTOK, about 5 kilometers from BEIGRADE. Here are also the general warehouses with all materiel needed for readying the missiles and the pads as well as the charges;
 - 7. Polygon, number unknown; MOJKOVAC (Montenegro);
 - 8. Polygon, number unknown; TARA;
- 9. Polygon, number unknown; USTIPRACA, located between GORAZDE and VISEGRAD.

The Polygons equipped to erect ramps are those of SEMIZOVAC and FOCA. Civilians and military personnel work in the warehouses where



there is no secret equipment, but only active career officers and non-commissioned officers are employed in the warehouses with secret equipment.

At the present time, concrete launching ramps for medium-range Ground-to-Ground missiles are being built in YUGOSLAVIA.

There are two types of missiles currently in use:	
length, approximately 8.40 meters; circ	_ 50X1-HUM
cumference, 1.20 meters; seven separate parts; maximum range, 800 kg	ilo-
meters; fuel, solid fuel Trotil SS.55; not guided. The manual for	BS-
sembly and functioning has been translated into Serbo-Croatian	
<u></u>	
At a range of 800 kilometers, the missile will hit within 800	0-
	50X1-HUM

2. <u>Soviet type</u>; commonly designated "M. 1"; approximate length, 6.40 meters; approximate circumference, 98 centimeters; five separate parts plus the fuze; maximum range, 800 kilometers; at a range of 800 kilometers, the missile will hit within 800-900 meters of the target.

900 meters of the target.

The fuel is compact and solid, straw-color, and turns to dust upon being broken. It is called "Kresit SS. 55 Super" and is contained in a sort of shell case 25-centimeters in diameter and made of an extremely thin copper alloy called "Instrumentpleh." In turn, 5 shell cases are held in steel boxes, 45 x 45 centimeters.

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The atomic warhead, weighing 700-800 kilograms, may not be opened nor tampered with by the detachments to which it is assigned. If anything must be done to the atomic warhead, it is sent to the Atomic Laboratory at VINCA for handling. The heads which are ready for use and checked every 6 months by the Atomic Laboratory at VINCA are equipped with a fuze of one of two types. One type is the KOVESNIKOVA, built under Russian patent by the Pobeda Arsenal of GORAZDE or by the Sloboda factory of CACAK; the other is the KARISIKOVA built under Yugoslav patent. The fuze is about 10 centimeters long and mounted on the nose of the ogive. It is both a percussion and a time fuze.

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The engine is a 1,000-hp jet and fed by a compressed-air tank within the missile.

The firing system is electrical clockwork, built at the "Pobeda" and "Sloboda" factories from Soviet designs.

The first pad and the subsequent assembly of the missile occurred in November 1955 at VARES; the prototypes date from 1954. Each ramp is built in a zone from which people have been moved and their land and buildings expropriated and paid for.

In order to disguise the preparatory work, immediately after the area is cleared of people the Command of the Army Engineer Corps begins work of minor military importance and then, as a second phase, builds the pads.

A crew of 7 persons, called Odelenje (Section), is used for each missile. In the event of war, squads designed to handle the missile will



be put at the disposal of the respective military zone commands and will be assigned a secret code number.

The ramps are concrete pads with attached underground storage areas which usually hold three unassembled missiles. For the "M 1" Soviet missiles, it takes a squad of 7 well-trained persons 6-8 hours to assemble the complete metal [launching?] frame, the two, 1,000-kilogram "Northon" cranes, and all other accessory equipment, starting with the pad cleared.

The assembly of the missile on the frame requires another 3-4 hours. The separate parts are loaded on carts pushed to the entrance of the galleries and then hauled up to the height of the cement platform on skids placed on the approach steps, using the front winch of a GMC truck.

The assembly of the separate parts of the actual missile is done with the use of two hand cranes.

The ramps for the missiles are equipped with an electric winch 50X1-HUM which pulls the missile on its cart directly from the magazine up to the launching frame. The same winch is used to elevate the missile within its frame to the launching position.

The specifications of the underground depots are 8 meters long,

4 meters wide, and 3 meters high. They are covered by a 20-centimeter
cap of cement with reinforcing rods of 18-22 millimeters. The difference
in height between the galleries and the platform varies according to
the nature of the terrain. The distance between the edge of the platform





and the beginning of the approach stairway to the magazines is never less than 20 meters and may be greater.

The metal framework of the platform, called "BEJILI 1" for the	
Soviet missiles and "BEJILI 2" is ordered piece by piece	50X1-HUM
because, during the attempts to make the parts at the	50X1-HUM
SENICA steel mill, it was seen that they would cost twice as much and	
equal the quality of the parts made	
It should be noted, however, that Maj Gen Ivan HARIS is planning	50X1-HUM
a new type of missile of complete Yugoslav manufacture.	

According to the plans of the Yugoslav Staff, the present 10 operational ramps will be increased to 18 in 1965.

At present, operational ramps are at the following places:

HAN PLJESAK, located between ZVORNIK and SOKOLAC, on the left side of the road near the CRNA REKA, at bench mark 505. There is an operational ramp for B.S. 13 missiles with the magazine driven in the side of a natural rise and at the same height as the ramp. (This is in the zone which the Supreme Command has prepared in case of war.)

VARES - PLANINA - ZVIJEZDA, 60 meters from the military TB hospital, at the altitude of 1,100 meters; two pads for "M 1" missiles arranged in a "T" on the VARES-PRZICI, 1,100 meters past PRZICI and on the left.

SKPOLJE, at an altitude of 321 meters, in a place about 4 kilometers in the direction of KACANIK, on the right of the road and 1,000 meters from the road; a pad for "M 1" missiles in a mine shaft.



Between BOSANSKA DUBICA and DVORISTE, 4 pads for "M 1" missiles located 10-15 meters from each other; at an altitude of 405 meters, 12-13 kilometers past BOSANSKA DUBICA, on the right of the road and 4,000-5,000 meters from the road.

PLANINA VITEZ, located between SARAJEVO and GORAZDE; 2 pads for "ML" missiles, after crossing the bridge over the BARE River and following the military road for 2,500 meters; the site is at the end of the road at an altitude of 908 meters.

The other sites where pads will be built are:

PLANINA RUDNIK, near MILANOVAC, about 22 kilometers from CACAK;

near LJUBJANA;

near SAMOBOR;

near KOS. MITROVICA, at an altitude of 704 meters.

The materiel for these pads is already in Yugoslavia but their construction is being held up until the people can be moved out and their private property expropriated.

The Soviet missiles come by train from BULGARIA and are unloaded at the DIMITROVGRAD station in Yugoslavia where Yugoslav personnel take charge of them.

The foreign technicians seen so far in Yugoslavia were Russians or Poles.

Training of officers assigned to missile sections is given in the Bulgarian schools at DRAGOMAN, PETRICN, and in a place about one kilometer from SOFIA, and also in POLAND.



The "Kresit SS.25 Super" fuel used in the Soviet missiles and the "Trotil SS.55" fuel used in the US missiles are produced in the following Yugoslav factories:

VOJNO TEKHNICKO SOVOBODA ("Svoboda" Arsenal) of CACAK, located on the outskirts of CACAK, toward KARLJEVO, near the civilian hospital. About 1,000 are employed here and work in sheds. The factory is surrounded by barbed wire strung on cement posts. It is protected by four AA batteries, each with four, quadruple, 22-mm, AA machine guns, built at KRAGUJEVAC. The technical manager is KANISOVSKI, a Russian who came to YUGOSLAVIA in 1955. The administrative director is Lieutenant Colonel PENESIC.

VOJNO TEKNICKO POBEDA ("Pobeda" Arsenal) of GORAZDE. The technical manager is VELKIC, a chemical engineer.

RUCANI, 20 kilometers from CACAK. The administrative manager is Lieutenant Colonel Slavko CABARCAPIC.



Sanitized Copy Approved for Release 2010/09/02: CIA-RDP80T00246A052900630001-5; under Lieutenant-Colonel General Blazo JANKOVIC. The subordinate Missile Section is under Major General Ivan HARIS, and Captain 1st Class Jovo DABIC checks the work done. HARIS and DABIC took a course on missiles in the USSR.

The following is a list of officers in the Inzenjeri Command who are taking a specialist-in-missiles course of 8-10 months in BULGARIA

are taking a specialist-in-missiles course of 8-10 months in BULGARIA	. ;
2d Lt Milenko STOJAKOVIC,	50X1-HUM
(PROKUPLJE); served at Polygon No 11 before attending course.	
2d Lt Radivoj DURIC ; served at	50X1-HUM
Polygon No 11 before attending course.	
2d Lt Golub served at	50X1-HUM
Polygon No 11 before attending course.	
lst Lt Spasoje BOJLJAVIC served at Polygon	50X1-HUM
No ll before attending course.	

List of personnel who have already attended the missile course in BULGARIA:



2d Lt Milan DVISAC	serving	50X1-HUN
at Polygon No 10.		
lst Lt Svatislav OGNJANOVIC		
serving at the "Communications Center of the Third Military Dis	trict."	
Capt 1st Class Zivar LUKIC serving at	Polygon	50X1-HUM
No 11.		
Capt Milorad BOSOVIC serving at Polygon	No 11.	50X1-HUM